

SEQUENCE LISTING

<110> Arya

<120> Lentivirus Vector System

<130> 67517

<140>

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<150> 09/869,588

<151> 2001-06-28

<150> PCT/US00/00390

<151> 2000-01-06

<150> 60/115,247

<151> 1999-01-07

<160> 32

<170> PatentIn Ver. 2.1

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<212> DNA

<213> Human immunodeficiency virus type 2

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: pROD(PK36)
leader sequence

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ggcagtaagg gcggcaggaa caaaccacga cgagtgctc ctagaaaggc gcgggcccag 120
gtaccaaagg gagcgtgtgg agcgggagga gaaagaggct ccgggtgaag gtaagtacct 180
acacctggga gatggg 196

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: pROD(SK36)
      leader sequence

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cctacctta gacaggtaga agattgtggg agatggg                      97

<210> 4
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pROD(SD36)
      Leader sequence

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<210> 5
<211> 109
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pROD(CG36)
      Leader sequence

<400> 5
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ggcagttaagg ctccgggtga aggttaagtac ctacaccgtg ggagatggg          109

<210> 6
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pROD(MR36)
      Leader sequence

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gtgggagatg gg                                132

<210> 7
<211> 82
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: pROD(SD36/EM)
envelope region

<400> 7
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agtcaaaga tcgaataata ca 82

<210> 8
<211> 30
<212> DNA
<213> Human immunodeficiency virus type 2

<400> 8
acagaggcctt ttgatgcata gaataataca 30

<210> 9
<211> 4203
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pCM-ENV(ROD)
vector

<220>
<221> promoter
<222> (1)..(795)
<223> CMV IE promotor

<400> 9
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ttt 4203

<210> 10
<211> 560
<212> DNA
<213> Simian immunodeficiency virus

<400> 10
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ctgggcagag tgactccacg cttgcttgct taaagccctc ttcaataaaag ctgccattt 180
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gcgcgggtcg gtaccagacg gcgtgaggag cgggagagga agaggcctcc gttgcaggt 480
aagtgcaca caaaaaagaa atagctgtct ttatccagg aagggtaat aagatagagt 540
gggagatggg cgtgagaaac 560

<210> 11
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pSIV(SD36)
Leader sequence

<400> 11
gattggctcc ggtgcaggt aagtgcaca cagtggaga tggcgtgag aaac 54

<210> 12
<211> 249
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pSIV(SDM)
Leader sequence

<400> 12
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taccagacgg cgtgaggagc gggagaggaa gggcctccg gttgatatcg agtgcaacac 180
aaaaaaagaaa tagctgtctt ttatccagga agggtaata agatagagt ggagatggc 240
gtgagaaac 249

<210> 13
<211> 550
<212> DNA
<213> Human immunodeficiency virus type 2

<400> 13
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tggtcacctg ggtgttccct gctagactct caccagtgc tggccggcac tggcagacg 120
gctccacgc tgcttgccta aaagacctct taataaaagct gccagttaga agcaagttaa 180
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gtgggagatg 550

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<210> 14
<211> 2769
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      pSGT-5 (SDM/RRE1)

<220>
<221> misc_feature
<222> (1536)..(1835)
<223> RRE sequence

<220>
<221> misc_feature
<222> (1)..(555)
<223> U3 sequence

<220>
<221> misc_feature
<222> (729)..(856)
<223> U5 sequence

<220>
<221> misc_feature
<222> (1101)..(1508)
<223> gag sequence

<220>
<221> misc_feature
<222> (1836)..(1863)
<223> multiple cloning site

<220>
<221> misc_feature
<222> (2042)..(2595)
<223> U3 sequence

<220>
<221> misc_feature
<222> (2596)..(2769)
<223> R sequence

<220>
<221> misc_feature
<222> (556)..(728)
<223> R sequence

<400> 14
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gttctttggg tggttatgga agcttagtacc agtagatgtc ccacaagagg gagatgacag 180
tgagactcac tgcttagtgc atccagcaca aacaaggcagg tttgatgacc cgcattggaga 240
aacatttagtt tggaggtttg accccacgct agcttttagc tacgaggcct ttattcgata 300
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 tttagaagca 2769

<210> 15
 <211> 1411
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: IRES and
 neomycin sequences

<400> 15
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 ggaataaggc cgggtgcgt ttgtctatgttattttcc accatattgc cgtctttgg 120
 caatgtgagg gcccggaaac ctggccctgt ctcttgcacg agcattccta ggggttttc 180
 ccctctcgcc aaaggaatgc aaggtctgtt gaatgtcgtt aaggaagcag ttccctgtt 240

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<210> 16
 <211> 548
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pSGT-5 (SDM/RRE1) 5' LTR

<400> 16
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 gctccacgt tgcttgccta aaagacctct taataaaagct gccaggtaga agcaagttaa 180
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 aggttggcgc cccaaacagg acttgaagaa gactgagaag ctttggaaaca cggctgagtg 360
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 aggtaccaag ggcggcgtgt ggagcggag taaaagaggc ctccgggtga tatcagtgcc 480
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 tggagatg 548

<210> 17
 <211> 248
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pSGT-5 (SDM/RRE1) region containing the
 substitution mutation of the SD

<400> 17
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 aaggcagtaa gggcggcagg aacaaaccac gacggagtgc tcctagaaaaa ggcgcaggccg 120

aggtaccaag ggccggcgtgt ggagcgggag taaaagaggc ctccgggtga tatcagtgcc 180
tacaccaaata acatagcca gaaggcttg ttatcctacc tttagacggg tagaagattg 240
tggagatg 248

<210> 18
<211> 237
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pSGT-5(SDX/RRE1) leader region

<400> 18
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<212> DNA
<213> Human immunodeficiency virus type 2

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pSGT-5(RRE1)

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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pROD(SD36/EM)

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<223> n represents a, c, t, or g.
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 PCM-ROD (SD36/EM)

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 cgctacctgg agggaaatat cagtaaaagt ttagaacacagg cacaattca gcaagagaaaa 480
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<210> 25
 <211> 761
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: mutant green
 fluorescent protein

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<210> 26
<211> 792
<212> DNA
<213> Human immunodeficiency virus type 2

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aagggctata gg 792

<210> 27
<211> 2801
<212> DNA
<213> Mus musculus

<400> 27
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<210> 28
<211> 1610
<212> DNA
<213> Bos taurus

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<210> 29
<211> 466
<212> DNA
<213> Homo sapiens

<400> 29
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cctgctgctt tgccctacatt gcccggccac tgcccccgtgc ccacatcaag gagtatttct 180
acaccagtgg caagtgtcc aaccgcgcg tcgtctttgt cacccgaaag aaccgccaag 240
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<210> 30
<211> 657
<212> DNA
<213> Homo sapiens

<400> 30
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gaggcaccgg agctggccct ggaccgggtg cctcaggatg cgtccaccaa gaagctgagc 180
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<210> 31
<211> 3873
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      pSGT-5 (SDM/RRE1/CM)

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<210> 32
<211> 1616
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: IRES and
      Puromycin sequences

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